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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,875	03/01/2002	Michihiro Shibata	628653/0004	7195

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EXAMINER

BLACKWELL RUDASIL, GWENDOLYN A

ART UNIT	PAPER NUMBER
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1775

DATE MAILED: 11/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/087,875	<b>Applicant(s)</b> SHIBATA, MICHIIRO	
	<b>Examiner</b> Gwendolyn A. Blackwell-Rudasill	<b>Art Unit</b> 1775	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 August 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☒ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
     a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless –*

*(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.*

2. Claims 1-7 are rejected under 35 U.S.C. 102(b) as anticipated by United States Patent no. 6,103,331, Kanno.

Kanno discloses an optical recording medium comprising at least a recording layer and a metallic reflective layer laminated on a resin substrate wherein the recording layer includes a styrylcyanine dye, (column 4, lines 25-31). The metallic layer can be made of Al, Ag, Au, Cu, Ni, Ti, and chalcogenide metals wherein the recording layer can be formed on the metallic layer, (column 5, lines 13-23; see also Figure 4). The protective film is formed of a photocuring resin that can be cured by UV curing *or* visible light curing, meeting the requirements of claims 1 and 5-6. The thickness of the metallic layer and the protective film range from 50-100 nm and 0.5-50µm respectively, meeting the requirements of claims 3-4 and 7, (columns 19-20, lines 50-25). Kanno also discloses that the substrate can be a thermoplastic resin such as polycarbonate, polyester, or amorphous olefin, meeting the requirements of claim 2, (column 6, lines 30-36).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

4. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent no. 6,103,331, Kanno in view of United States Patent no. 6,083,597, Kondo further in view of United States Patent no. 6,440,519, Takase et al.

Kanno discloses an optical recording medium comprising at least a recording layer and a metallic reflective layer laminated on a resin substrate wherein the recording layer includes a styrylcyanine dye, (column 4, lines 25-31). The metallic layer can be made of Al, Ag, Au, Cu, Ni, Ti, and chalcogenide metals wherein the recording layer can be formed on the metallic layer, (column 5, lines 13-23; see also Figure 4). The protective film is formed of a photocuring resin that can be cured by UV curing *or* visible light curing as well as an inorganic material such as silicon oxide. The thickness of the metallic layer and the protective film range from 50-100 nm and 0.5-50µm respectively, (columns 19-20, lines 50-25). The substrate can be a thermoplastic resin such as polycarbonate, polyester, or amorphous olefin, (column 6, lines 30-36). A protective layer can be placed between the recording layer and the adhesive layer, (column 6, lines 6-12; see also Figure 3). Kanno does not specifically disclose that an adhesive component is located between the recording layer and the protective layer.

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Kondo discloses a delamination proof resin, which acts as an adhesive, layer located between the recording layer and the protective layer, (column 2, lines 50-67).

Takase et al disclose a photocurable adhesive material that is used for optical disks. The photocurable resin composition comprises an oligomer having a polymeric backbone linked by urethane bonds to (meth)acrylate terminal groups, a phosphate group, a (meth)acrylate compounds and optionally an initiator. The adhesive is suitable for use in laminating the multilayers of an optical disk, (column 2, lines 1-25). Radiation such as UV light, visible light, and electron beam can be used to cure the adhesive, (column 25, lines 23-38).

Kanno, Kondo, and Takase et al disclose inventions related to multilayer optical recording mediums. In particular, Kondo and Takase et al disclose that adhesive layers can be used in optical recording mediums and the placement of such layers. Based upon those teachings, it would have been obvious to one skilled in the art at the time of invention to modify the optical recording medium of Kanno with the adhesive composition and layer placement of Kondo and Takase et al to create an optical recording medium having increased adhesion between the protective film and the recording layer thereby providing increased protection to the recording layer.

#### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

*Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

United States Patent no. 6,376,040, disclose an optical recording medium having the layer structure substantially the same as that exemplified by Applicant.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gwendolyn A. Blackwell-Rudasill whose telephone number is

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(703) 305-9741. The examiner can normally be reached on Monday - Thursday; 6:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (703) 308-3822. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Gwendolyn A. Blackwell-Rudasill  
Examiner  
Art Unit 1775

GBR  
gbr

  
DEBORAH JONES  
SUPERVISORY PATENT EXAMINER